

SCIENCE QUTSAV[®]
Science is awesome

SLIME



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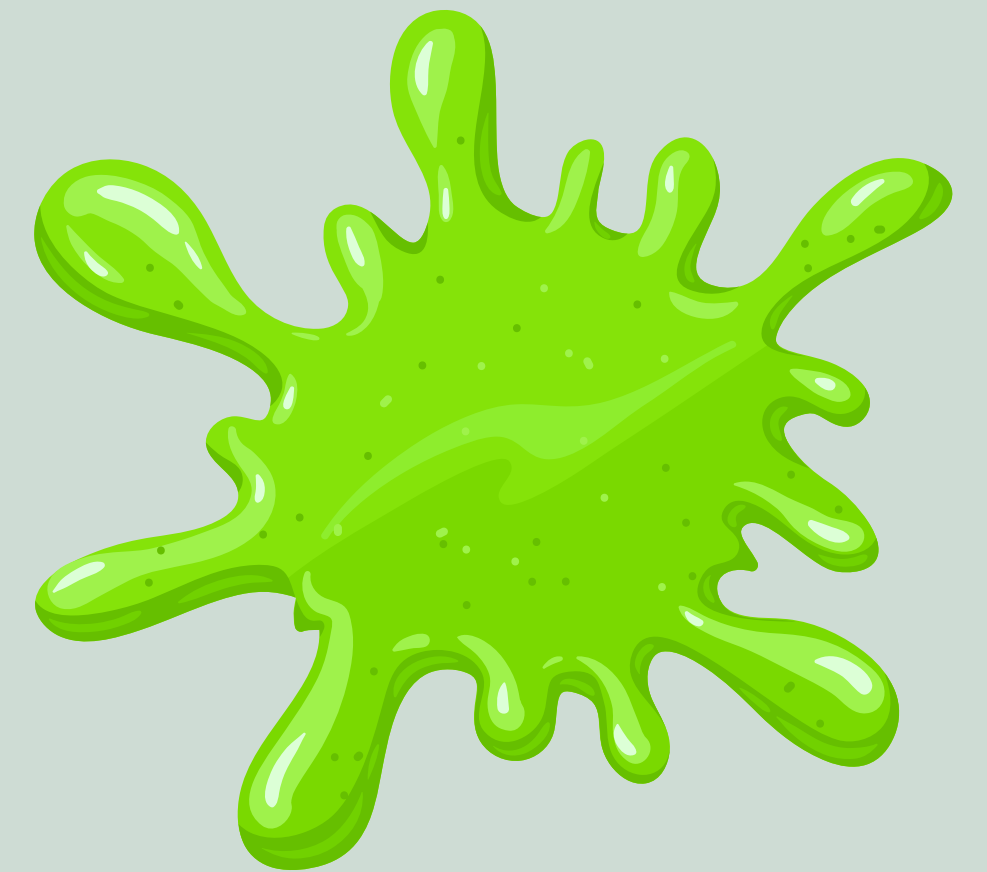
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Overview

Slime is a popular sensory play material that is soft, squishy, and often gooey in texture. It can be stretched, molded, and manipulated, making it a fun and engaging tactile experience for people of all ages, especially children. Slime is made from a combination of basic ingredients that react to create a Squishy fluid which is non sticky and fun to play with



Engineering challenge

Making slime is a playful way for kids to explore changing materials. They learn by doing, discovering how things transform while staying curious about science. This hands-on activity sparks creativity and a love for experimenting, setting them on a path of discovery and learning.



Materials Required



1



2



3

4



5



6



| Sr.No | Name | Qty |
|-------|-----------------|-----|
| 1 | Slime gum | 3 |
| 2 | Ice cream stick | 2 |
| 3 | Plastic cup | 1 |
| 4 | Glitter | 1 |
| 5 | Borax | 2 |
| 6 | Tissue paper | 1 |

Materials Required



| Sr.No | Name | Qty |
|-------|-----------------|-----|
| 7 | Soap oil | 1 |
| 8 | Small container | 1 |
| 9 | Sticker | 1 |
| 10 | Ready slime | 1 |

Procedure

Take plastic cup and two slime gum

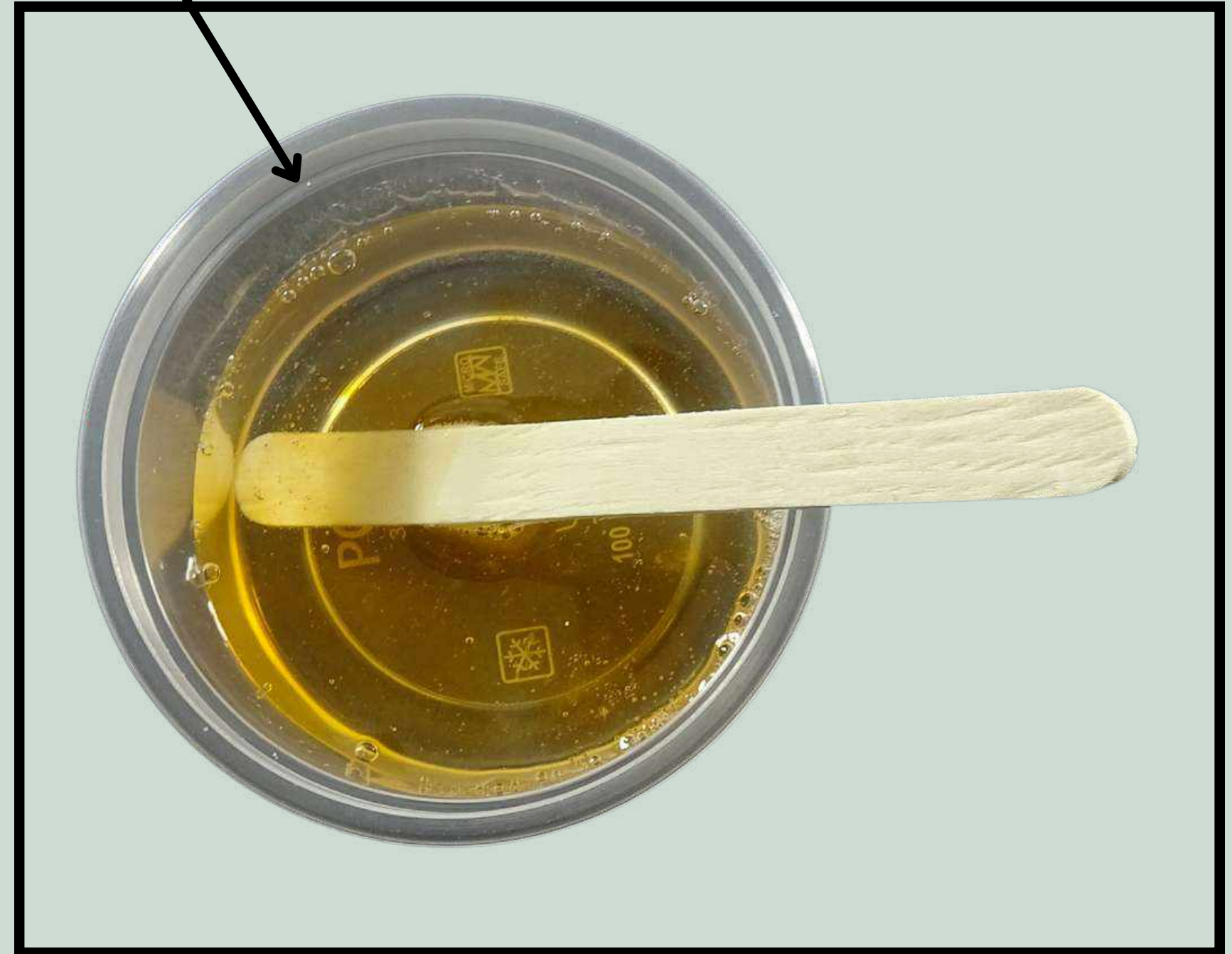


Open plastic cup box and
2 slime gum caps as shown

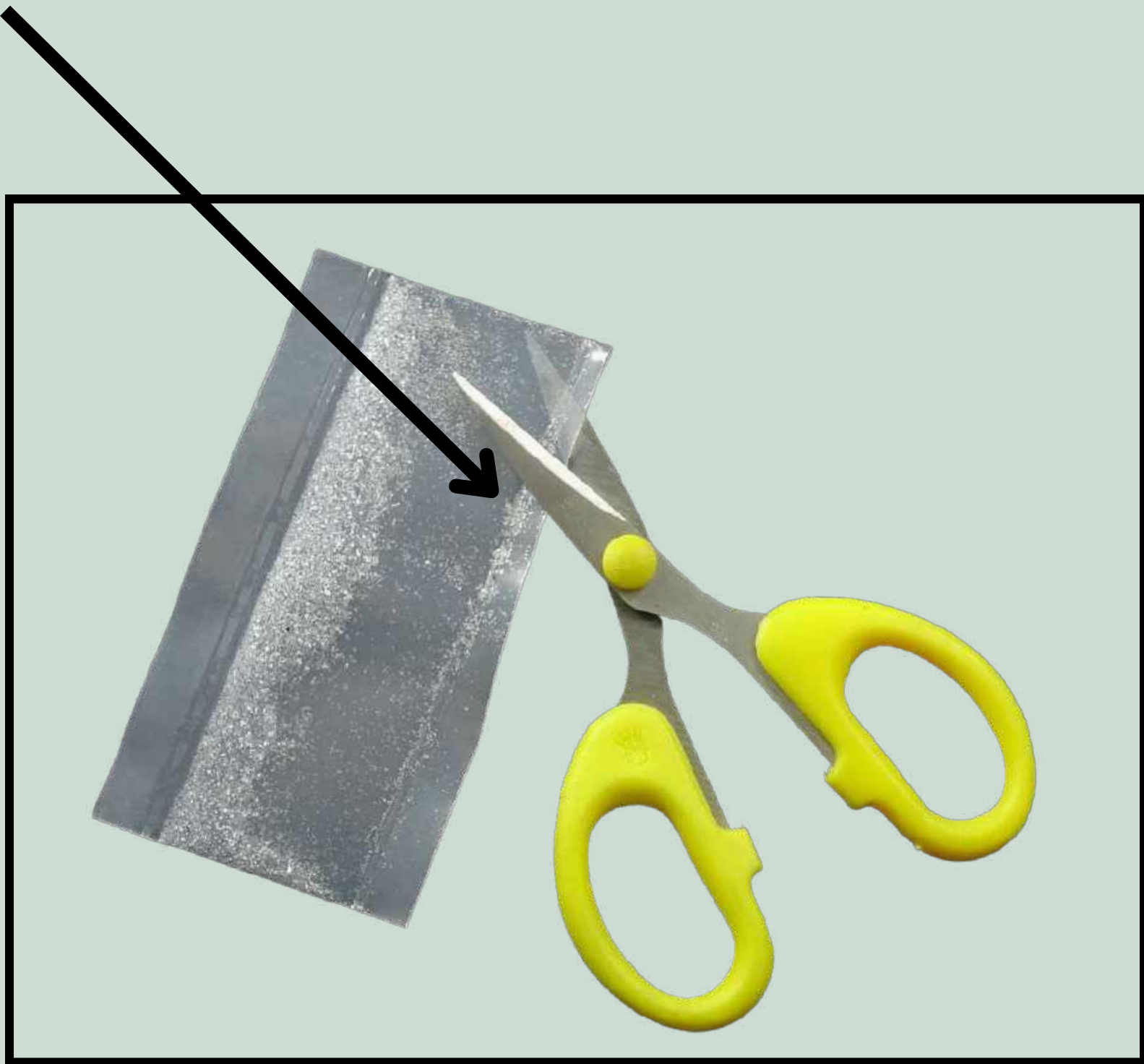
Pour two slime gum into a plastic cup box as shown



Stir the liquid with icecream stick slowly until the air bubble disssolve



Cut glitter packet using scissors



Pour half quantity of glitter to slime gum container



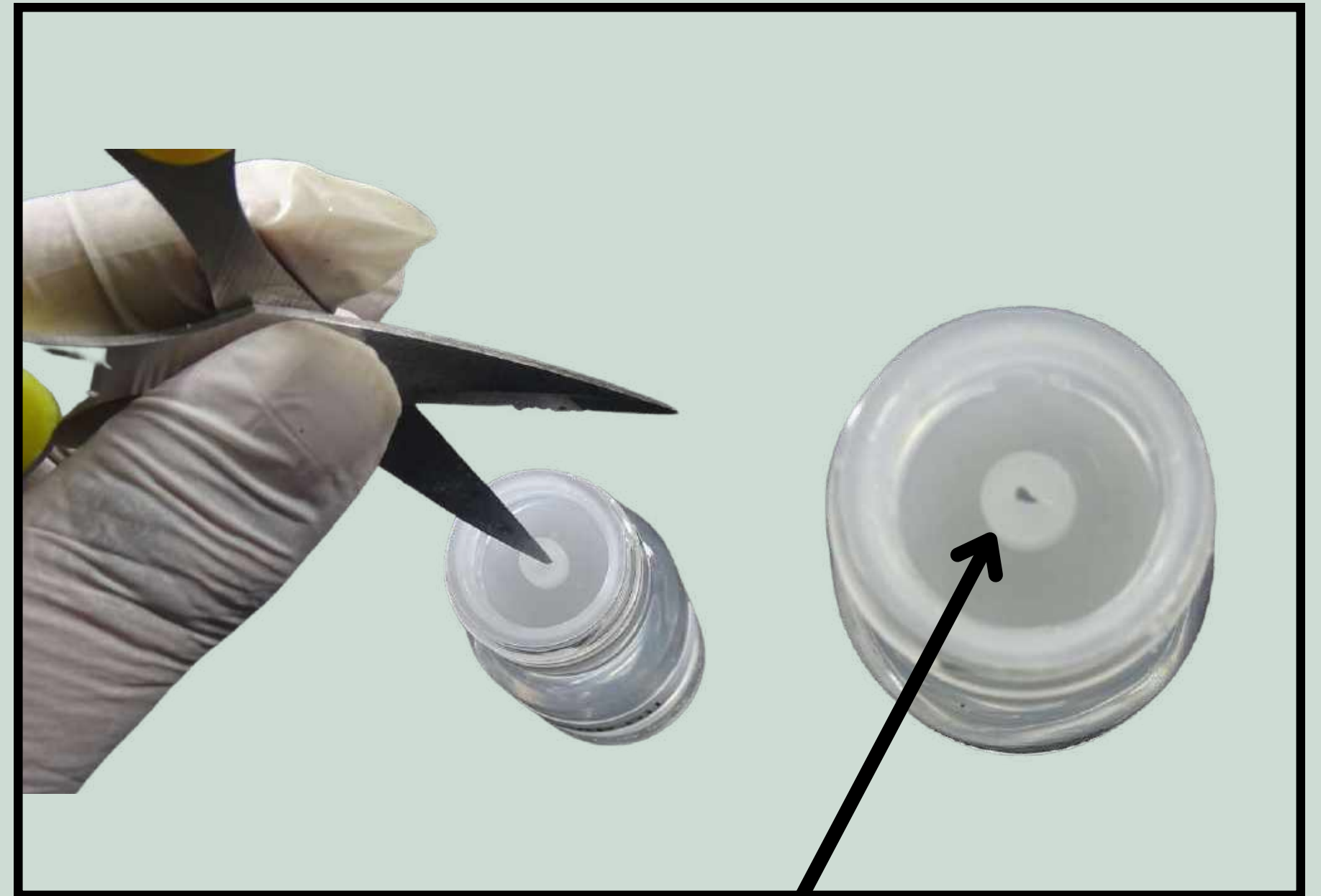
Mix glitter and slime gum using icecream stick as shown



**Open soap oil
container cap**



**Make a small hole in the soap oil
container using scissors as shown**



Pour 10 ml of (1/5th of the bottle) soap oil to slime gum container



Open small container cap as shown



**Add 50ml of water to
small container**



Cut borax packet using scissors



Add 2 grams of borax to small container (half of the pouch)

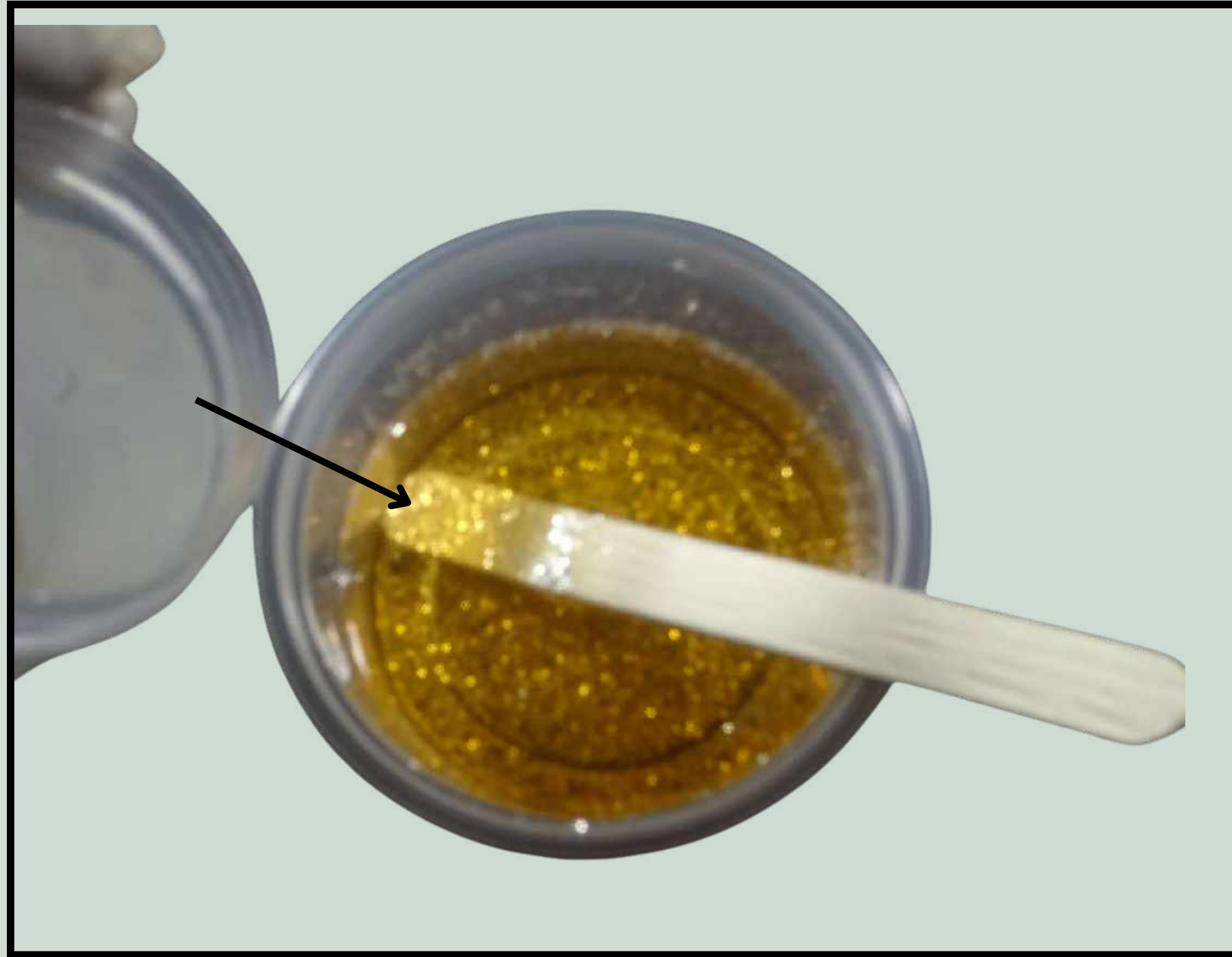


Stir the borax solution with icecream stick for few seconds



Borax solution

Add 10 ml borax solution to slime gum container



NOTE: Make sure that the borax is not too much in a solution .

Stir the liquid with icecream stick until the slimy texture is obtained



NOTE: Add 5 ml to 10 ml more borax solution if the texture is not obtained

Transfer the slime to your hands and play for a while



YOUR SLIME READY



HOW DOES IT WORKS ?

The glue is a polymer called polyvinyl acetate. The custard powder contains mostly starch which is a polymer made from glucose. The borax acts as a cross-linking agent and binds the two polymer chains together. Too much Borax gives too many cross-links and hence a brittle substance.

The glue and the custard powder are both long-chain molecules. You can think of them as looking like very small strings like you noodles. The borax reacts with these long chains, 'zipping' them together with short bridges just like how ladder has a small rungs or steps. This long bendy 'rubbery ladder' can be pulled, stretched, rolled up, etc. It is very elastic, which is the important property for a bouncy ball.